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10/643,648	08/20/2003	Dong-Hyun Jeon	240-8	5233
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
	10/643,648	JEON, DONG-HYUN	
Office Action Summary	Examiner	Art Unit	
	LUNA CHAMPAGNE	3627	
The MAILING DATE of this communication ap Period for Reply	ppears on the cover sheet with the	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPI WHICHEVER IS LONGER, FROM THE MAILING [ - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO .136(a). In no event, however, may a reply be tild d will apply and will expire SIX (6) MONTHS from te, cause the application to become ABANDONE	N. mely filed  the mailing date of this communication. ED (35 U.S.C. § 133).	
Status			
1) ■ Responsive to communication(s) filed on 17 in 2a) ■ This action is <b>FINAL</b> . 2b) ■ The 3) ■ Since this application is in condition for allowed closed in accordance with the practice under	is action is non-final. ance except for formal matters, pr		
Disposition of Claims			
4)  Claim(s) 12 and 13 is/are pending in the appl 4a) Of the above claim(s) is/are withdra 5)  Claim(s) is/are allowed. 6)  Claim(s) 12 and 13 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/	awn from consideration.		
<u> </u>			
<ul> <li>9) The specification is objected to by the Examin 10) The drawing(s) filed on is/are: a) ac Applicant may not request that any objection to the Replacement drawing sheet(s) including the corre</li> <li>11) The oath or declaration is objected to by the Examin 11.</li> </ul>	ccepted or b) objected to by the e drawing(s) be held in abeyance. Se ction is required if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:  1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the pri application from the International Bures * See the attached detailed Office action for a list	nts have been received. nts have been received in Applicat ority documents have been receiv au (PCT Rule 17.2(a)).	ion No ed in this National Stage	
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail D 5)  Notice of Informal I 6)  Other:	ate	

## **DETAILED ACTION**

## Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/17/08 has been entered.

Claims 1-11 are cancelled. Claims 12 and 13 are presented for examination.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hughes (5,809,143), in view of Helmut et al. (3,346,850), in further view of Shino (5,296,692).

Re claims 12 and 13, Hughes disclose an electronic settlement system using a keyboard having multiple card identification (*Magnetic Card Reader, Smart Card I/F*) and charging functions (*secure financial transaction*) for on-line electronic commerce via an electronic commerce server which provides sales information of an item (*host* -

see e.g. col. 3, lines 40-45 and fig. 1) and a financial settlement institute server which conducts financial settlements (banking system 190 - see e.g. col. 7, lines 56-57); an electronic cash management server for charging a smart card and an RF card through a fund transfer or a cash service under an interlock with the financial settlement institute server (the order data and the credit card, debit card or a smart card information are sent via modem 44 to secure host 188. Next, the secure host sends the card information and the PIN to the banking system 190); a keyboard adapt – the banking system makes payment to the merchant's account – See e.g. col. 8, lines 24-39);

Page 3

a magnetic card identification section to read a magnetic card; a smart card identification/charging section to read/write a smart card (see e.g. col. 5, lines 2-5); a USB up/down stream port to transmit the card information, which has been transformed into a machine language code by the control unit, to the user PC and transmit the data received via the user PC from the electronic cash management server or the financial settlement server to the control unit (interface 31);

a transmission/reception section interlocked with the electronic cash management server; the financial settlement institute server and the electronic commerce server via a web server (see e.g. fig. 11); a microprocessor having a decoder and an encoder (Encrypter 40) to interpret the machine language code received under an interlock with the control unit of the keyboard for providing the transmission/reception section with a control signal and transform the data received from the electronic cash management server, the financial settlement institute server and the electronic commerce server via the transmission/reception server into a machine language code

for transmitting it to the control unit of the keyboard (see e.g. col. 4, lines 14-17); a memory unit for storing a control program to write the smart card and the RF card in a fund transfer or a magnetic card cash service type according to the control of the microprocessor under an interlock with the electronic cash management server (interface 36 - see e.g. col. 3, lines 63-67; col. 4, lines 1-2); a USB port for transmission/reception of data under an interlock with the USB up/down stream port of the keyboard according to the control of the microprocessor (interface 31);

a card-charging step for a user to charge a smart card or an RF card using the keyboard (see e.g. col. 7, lines 11-13 - a user via the secure keyboard can transfer money to and from the smart card) through an access to an electronic cash management server via a web server interlocked with the user PC (see e.g. col. 8, lines 26-42); a settlement approval step for the user to access the electronic commerce server via a web server through a line separate from the electronic cash management server for choosing an item and a settlement type and scan the charged card according to the chosen settlement type using the keyboard for getting a settlement approval (see e.g. fig. 11; col. 7, lines 45-65); and a settlement confirmation step for the user to access the financial settlement institute server through a line separate from the electronic cash management server for an inquiry on the service particulars or the balance of the card and to get confirmation of the settlement (see e.g. col. 8, lines 30-32);

getting a user authentication through an access to the electronic cash management server using the user PC (see e.g. col. 10, lines 61-62); choosing a card-

charging type (see e.g. col. 10, lines 65-67); scanning the smart card or the RF card and transmitting the card information to the financial settlement institute server if a fund transfer is chosen as the card-charging type (see e.g. col. 10, lines 15-34); scanning the magnetic card and transmitting the card information to the financial settlement institute server if a cash service is chosen as the card-charging type (see e.g. col. 10, lines 20-27); requesting a fund transfer or a cash service in accordance the amount of money inputted by the user (see e.g. col. 6, lines 22-33); charging the smart card or the RF card with the amount of money if the fund transfer or the cash service is approved (see e.g. col. 5, lines 40-45);

Page 5

choosing an item and a settlement type through an access to the electronic commerce server using the user PC (see e.g. col. 10, lines 55-67); scanning the card according to chosen settlement type and transmitting the card information to the financial settlement institute server (see e.g. col. 10, lines 20-27); and requesting a settlement approval to the card and confirming the settlement approval (see e.g. col. 7, lines 62-65);

getting a user authentication by scanning the card after an access to the financial settlement institute server using the user PC (see e.g. col.6, lines 3-12); inquiring service particulars or a balance of the card in relation to the card-charging type (see e.g. col. 10, lines 15-16, fig. 14); and confirming establishment of the settlement by the card after the inquiry and outputting a settlement confirmation receipt using a printer for receipt printing interlocked with the keyboard (see e.g. col. 9, lines 41-51).

Hughes does not explicitly disclose a control unit configured to transform the data read by the magnetic card identification section, the smart card identification /charging section or the RF card identification/charging section into a machine language code for transmission and to interpret a machine language code received from the user PC for applying a control signal.

However, Helmut et al. disclose a control unit configured to transform the data read by the magnetic card identification section, the smart card identification /charging section or the RF card identification/charging section into a machine language code for transmission and to interpret a machine language code received from the user PC for applying a control signal (see e.g. col. 1, lines 46-56 – when information is to be transferred from the card to the data processing machine, the code in which the information appears on the card has to be converted to the code of the machine, and conversely, the machine code has to be converted to the coed of the card whenever information is to be put out by the machine).

Therefore, it would have been obvious, at the time of the invention, to a person of ordinary skill in the art to modify Hughes, and include a control unit configured to transform the data read by the magnetic card identification section, the smart card identification /charging section or the RF card identification/charging section into a machine language code for transmission and to interpret a machine language code received from the user PC for applying a control signal, as taught by Helmut et al., in order to facilitate data conversion and processing between the devices used.

Hughes, in view of Helmut et al., does not explicitly disclose a RF card identification/charging section to read/write an RF card.

However, Shino discloses an RF card identification/charging section to read/write an RF card (RF cards and IC cards are sometimes used interchangeably-see e.g. col. 8, lines 8-13).

Therefore, it would have been obvious at the time of the invention to a person of ordinary skill in the art to modify Hughes, in view of Helmut et al., by implementing a RF card identification/charging section to read/write an RF card in the system, as taught by Shino, in order to make the system more convenient to users through the use of different types of devices.

## Response to Arguments

Applicant's arguments have been considered but are moot in view of the new grounds of rejection. Applicant argues that Hughes does not disclose "a control unit configured to transform the data read by the magnetic card identification section, the smart card identification /charging section or the RF card identification/charging section into a machine language code for transmission and to interpret a machine language code received from the user PC for applying a control signal". Please see Helmut (col. 1, lines 46-56), as machine language code is commonly used in the art for communication between devices. The combination of Hughes, Helmut et al. and Shino, anticipates Applicant's claimed limitations.

Application/Control Number: 10/643,648 Page 8

Art Unit: 3627

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Luna Champagne whose telephone number is (571)

272-7177. The examiner can normally be reached on Monday - Friday; 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Florian Zeender can be reached on (571) 272-6790. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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/F. Ryan Zeender/ Supervisory Patent Examiner, Art Unit 3627

May 7, 2008

/Luna Champagne/ Examiner, Art Unit 3627